cyanide catalysis and wherein the reaction of the alkylene oxides onto the H-functional initiator substances is carried out in the presence of at least one metal salt of the formula

$$M^{(A+)}_{a}X^{(B-)}_{b}$$
, where

M is selected from at least one of  $Li^+$ ,  $Na^+$ ,  $K^+$ ,  $Rb^+$ ,  $Cs^+$ ,  $Be^{2^+}$ ,  $Mg^{2^+}$ ,  $Ca^{2^+}$ ,  $Sr^{2^+}$ , and  $Ba^{2^+}$ ,

X is selected from at least one of F<sup>-</sup>, Cl<sup>-</sup>, ClO<sup>-</sup>, ClO<sub>3</sub><sup>-</sup>, ClO<sub>4</sub><sup>-</sup>, Br<sup>-</sup>, l<sup>-</sup>, IO<sub>3</sub><sup>-</sup>, CN<sup>-</sup>, OCN<sup>-</sup>, NO<sub>2</sub><sup>-</sup>, NO<sub>3</sub><sup>-</sup>, HCO<sub>3</sub><sup>-</sup>, CO<sub>3</sub><sup>2</sup>, S<sup>2</sup>, SH<sup>-</sup>, HSO<sub>3</sub><sup>-</sup>, SO<sub>3</sub><sup>2</sup>, HSO<sub>4</sub><sup>-</sup>, SO<sub>4</sub><sup>2</sup>, S<sub>2</sub>O<sub>2</sub><sup>2</sup>, S<sub>2</sub>O<sub>3</sub><sup>2</sup>, S<sub>2</sub>O<sub>4</sub><sup>2</sup>, S<sub>2</sub>O<sub>5</sub><sup>2</sup>, S<sub>2</sub>O<sub>6</sub><sup>2</sup>, S<sub>2</sub>O<sub>7</sub><sup>2</sup>, S<sub>2</sub>O<sub>8</sub><sup>2</sup>, H<sub>2</sub>PO<sub>2</sub><sup>-</sup>, H<sub>2</sub>PO<sub>4</sub><sup>-</sup>, HPO<sub>4</sub><sup>2</sup>, PO<sub>4</sub><sup>3</sup>, P<sub>2</sub>O<sub>7</sub><sup>4</sup>, (C<sub>n</sub>H<sub>2n-1</sub>O<sub>2</sub>)<sup>-</sup>, (C<sub>n+1</sub>H<sub>2n-2</sub>O<sub>4</sub>)<sup>2</sup> where n = 1-20 and their mixed salts and mixtures,

A<sup>+</sup> is the valence of the cation,

B is the valence of the anion and

a and b are integers,

with the proviso that the compound is electrically neutral.

2. (Twice Amended) A process as claimed in claim 1, wherein the metal salt  $M^{(A^+)}{}_a X^{(B^-)}{}_b$  is selected such that:

$$M^{(A+)} = Li^+, Na^+, K^+, Mg^{2+}, or Ca^{2+}, and$$

$$X^{(B-)} = F^-, Cl^-, Br^-, l^-, NO_3^-, HCO_3^-, CO_3^{2-}, HSO_4^-, SO_4^{2-}, H_2PO_4^-, HPO_4^{2-}, PO_4^{3-}, (C_nH_{2n-1}O_2)^-, or  $(C_{n+1}H_{2n-2}O_4)^{2-}$  where  $n = 1-20$$$

and their mixed salts and mixtures, where

A<sup>+</sup> is the valence of the cation,

B is the valence of the anion and

a and b are integers,

with the proviso that the compound is electrically neutral.

- 5. (Amended) A process as claimed in claims 1 or 2, wherein the metal salt is used in an amount of from 0.1 to 50 ppm, based on the compound having at least two active hydrogen atoms.
- 6. (Twice Amended) A polyurethane produced according to any one of the processes as claimed in claims 1 or 2.
- 7. (Twice Amended) A flexible polyurethane foam produced according to any one of the processes as claimed in claims 1 or 2.
- 8. (Twice Amended) A polyether alcohol comprising the reaction product of H-functional compounds with alkylene oxides using multimetal cyanides as catalysts comprising at least one metal salt of the formula

$$M^{(A+)}_{a}X^{(B-)}_{b}$$
, where

M is selected from at least one of Li<sup>+</sup>, Na<sup>+</sup>, K<sup>+</sup>, Rb<sup>+</sup>, Cs<sup>+</sup>, Be<sup>2+</sup>, Mg<sup>2+</sup>, Ca<sup>2+</sup>, Sr<sup>2+</sup>, and  $Ba^{2+}$ ,

X is selected from at least one of F<sup>-</sup>, Cl<sup>-</sup>, ClO<sup>-</sup>, ClO<sub>3</sub><sup>-</sup>, ClO<sub>4</sub><sup>-</sup>, Br<sup>-</sup>, l<sup>-</sup>, IO<sub>3</sub><sup>-</sup>, CN<sup>-</sup>, OCN<sup>-</sup>, NO<sub>2</sub><sup>-</sup>, NO<sub>3</sub><sup>-</sup>, HCO<sub>3</sub><sup>-</sup>, CO<sub>3</sub><sup>2</sup>, S<sup>2</sup>, SH<sup>-</sup>, HSO<sub>3</sub><sup>-</sup>, SO<sub>3</sub><sup>2</sup>, HSO<sub>4</sub><sup>-</sup>, SO<sub>4</sub><sup>2</sup>, S<sub>2</sub>O<sub>2</sub><sup>2</sup>, S<sub>2</sub>O<sub>3</sub><sup>2</sup>, S<sub>2</sub>O<sub>4</sub><sup>2</sup>, S<sub>2</sub>O<sub>5</sub><sup>2</sup>, S<sub>2</sub>O<sub>6</sub><sup>2</sup>, S<sub>2</sub>O<sub>7</sub><sup>2</sup>, S<sub>2</sub>O<sub>8</sub><sup>2</sup>, H<sub>2</sub>PO<sub>2</sub><sup>-</sup>, H<sub>2</sub>PO<sub>4</sub><sup>-</sup>, HPO<sub>4</sub><sup>2</sup>, PO<sub>4</sub><sup>3</sup>, P<sub>2</sub>O<sub>7</sub><sup>4</sup>, (C<sub>n</sub>H<sub>2n-1</sub>O<sub>2</sub>)<sup>-</sup>, (C<sub>n+1</sub>H<sub>2n-2</sub>O<sub>4</sub>)<sup>2</sup> where n = 1-20 and their mixed salts and mixtures,

A<sup>+</sup> is the valence of the cation,

B is the valence of the anion and

a and b are integers,

with the proviso that the compound is electrically neutral.